

Summary of selected water-quality data from ground-water samples collected from February 1995 through November 2010 as a part of the *Equus* Beds Ground-Water Recharge Project.

[mg/L, milligrams per liter; DWA, drinking water advisory; SDWR, secondary drinking water regulation; <, less than; MCL, maximum contaminant level; µg/L, micrograms per liter; cols/100 mL, colonies per 100 milliliters; MCLG, maximum contaminant level goal]

Little Arkansas River at Highway 50 near Halstead									
Site Number: 07143672									
Compound or fecal indicator bacteria	Water-quality criteria	Number of Samples	Minimum	Maximum	Mean	Median	Percentage of Samples Detected	Percentage of Samples Exceeding Criteria	Percentage of Replicate Samples Exceeding Criteria
Sodium, dissolved (mg/L)	20 mg/L (DWA) ^a	235	3.38	498	79.6	68.5	100	78.3	76.7
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ^a	235	<5	312	38.2	37.5	96.6	0.426	0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ^a	236	<5	932	149	136	99.6	22.5	13.3
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ^a	202	0.01	5.44	0.809 ^b	0.630 ^b	84.7	0	0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ^a	130	<1	14.1	5.22	4.80	96.9	7.69	9.09
Iron, dissolved (µg/L)	300 ug/L (SDWR) ^a	235	4.3	864.2	32.7 ^b	9.60 ^b	50.2	2.55	3.33
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ^a	233	<1	1140	165 ^b	68.7 ^b	85.4	54.1	67.9
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ^a	190	<1	2,000,000	20,400	1,350	96.3	96.3	96.3
Fecal coliform bacteria ^c (cols/100 mL)	200 cols/100mL (MCLG) ^d	220	10	3,000,000	18,000	864	99.5	83.2	90.0
	2,000 cols/100mL (MCLG) ^d	88	1	6,670	776	123	98.9	11.4	7.14
<i>Escherichia coli</i> ^e (cols/100 mL)	262 cols/100mL (MCLG) ^f	68	33	25,700	2,620	964	100	85.3	100
	2,358 cols/100mL (MCLG) ^f	28	<1	4,100	862	113	96.4	10.7	25.0
Atrazine herbicide	3 µg/L as an annual average ^a (MCL)	203	0.028	46.22	4.91	2.44	98.0	45.8	33.3
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ^a (MCL)	1,049	<0.05	46.4	2.47	1.02	88.8	24.6	32.4
Alachlor (µg/L)	2 µg/L (MCL) ^a	211	<0.002	28	0.442	0.025	52.1	2.84	6.67

^a U.S. Environmental Protection Agency (2006)

^b Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

^c For fecal coliform bacteria, the primary contact recreation surface-water criterion of 200 cols/100mL was used from April 1 - October 31 (when most water-contact recreation occurs); from November 1 - March 31, the criterion of 2,358 cols/100mL was used.

^d Kansas Department of Health and Environment (2001)

^e For *Escherichia coli*, the primary contact recreation surface-water quality criterion of 262 cols/100mL was used from April 1 - October 31 for Class B (public access) stream segments; from November 1 - March 31, the criterion of 2,358 cols/100mL was used.

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Little Arkansas River at Sedgwick, KS									
Site Number 07144100									
Compound or fecal indicator bacteria	Water-quality criteria	Number of Samples	Minimum	Maximum	Mean	Median	Percentage of Samples Detected	Percentage of Samples Exceeding Criteria	Percentage of Replicate Samples Exceeding Criteria
Sodium, dissolved (mg/L)	20 mg/L (DWA) ^a	219	1.5	132	46.3	42.8	100	68.0	72.4
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ^a	219	<5	211	36.8	35.8	95.4	0	0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ^a	223	<5	305	72.4	59.9	96.9	0.897	0
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ^a	211	0.01	9.42	1.23	1.11	100	0	0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ^a	141	<1	14.1	5.19	4.40	99.3	9.22	20.0
Iron, dissolved (µg/L)	300 ug/L (SDWR) ^a	219	<5	620.9	58.8 ^b	16.0 ^b	61.6	7.76	0
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ^a	218	<1	740	95.4 ^b	29.5 ^b	78.4	41.7	48.1
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ^a	190	<1	9,000,000	56,900 ^b	1,700 ^b	93.2	93.2	78.3
Fecal coliform bacteria ^c (cols/100 mL)	200 cols/100mL (MCLG) ^d	242	16	4,000,000	22,460	1515	100	77.3	62.5
	2,000 cols/100mL (MCLG) ^d	94	<1	20,500	1,424	115	95.7	13.8	10.0
<i>Escherichia coli</i> ^e (cols/100 mL)	262 cols/100mL (MCLG) ^f	76	13	46,000	5,948	1,890	100	80.3	66.7
	2,358 cols/100mL (MCLG) ^f	29	3	17,250	1,494	132	100	20.7	0
Atrazine herbicide	3 µg/L as an annual average ^a (MCL)	417	0.04	48	5.76	3.38	99.5	54.9	52.0
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ^a (MCL)	2920	0.09	41	3.85	1.98	97.2	37.5	42.5
Alachlor (µg/L)	2 µg/L (MCL) ^a	448	<0.002	12.7	0.449	0.110	68.8	2.46	0

^a U.S. Environmental Protection Agency (2006)

^b Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

^c For fecal coliform bacteria, the primary contact recreation surface-water criterion of 200 cols/100mL was used from April 1 - October 31 (when most water-contact recreation occurs); from November 1 - March 31, the criterion of 2,358 cols/100mL was used.

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